### APPENDIX A REPLACEMENT OF CREMATOR OPTIONS

### 1.0 BACKGROUND

Cheshire East provides a Bereavement Service for all. The principle service users however are residents from within the authority. The total number of residents in the authority is estimated to number in excess of, a number which has shown only modest growth over the past 20 years.

The mortality rate across Cheshire East has remained consistent with this trend and currently it is estimated there are approximately 3,600 deaths per annum.

As the service prepares to meet future needs it is important to note that the mortality rate is expected to increase over the next few decades, potentially creating greater demand for cremations and burials within the authority

#### 1.2 **Decision Requested**

Members are asked to determine which option officers should progress.

#### 2.0 INTRODUCTION

Cheshire East operates two Crematoria which are located in Macclesfield and Crewe. Each Crematorium has two operational cremators. The cremators in Macclesfield have recently been replaced with modern abatement equipment. The cremators in Crewe are now due for similar replacement and this paper reviews the alternative options that could be achieved.

2.1 The key Options considered are summarised below:

**Option 1** – Continue to operate the existing equipment at Crewe until it fails. After failure, rely solely on the facilities provided in Macclesfield.

**Option 2** – Replace the cremators at Crewe with traditional unabated cremators (like for like)

**Option 3** – Replace the cremators with modern abatement ones that eliminate mercury emissions. (As the Council has already undertaken in Macclesfield).

### 2.2 SERVICE PROVISION

Currently the Borough's two crematoria conduct approximately 2,800 cremations and 400 burials per annum with the approximate splits.

sfield - 1,500 cremations & 190 Burials

Crewe

Maccle

- 1,300 cremations & 200 Burials

The total number of cremations and burials completed therefore is 3,200. The difference between this number and the number of mortalities (3,600) reflects the fact that there are two main hospitals in the Borough, Macclesfield General Hospital, and Leighton Hospital. People dying in these hospitals have to register the death within Cheshire East even though around 30% are estimated to be residents from outside the Borough area.

To continue with this level of service provision it is essential that the Council has two operational cremators at both Crewe and Macclesfield Crematoriums.

### 2.3 CONDITION OF CREWE CREMATORS

The existing cremators at Crewe were installed in December 1997. At 15 years the equipment is now reaching the upper end of expected operations with increasing maintenance costs and reducing reliability.

A recent condition report prepared by the current Maintenance Contractor has indicated that the cremators may potentially last a further 2 - 3 years although costs are likely to increase proportionally with the added concern of reducing operational time. The main aspects of the report indicated the following:-

- Display units this is a statutory requirement of the 'Permit to Operate'. The Permit was issued last year on the understanding that the faulty units would be replaced. Due to the age of the machines the suppliers have only just found suitable replacements at a cost of £16,595.00.
- Increase maintenance costs, due to the increased difficulties in sourcing available parts and equipment and the increasing need to replace worn parts. Current estimates suggest the general service/maintenance charges will be in the region £25,500 over the next 2 years.
- Consumable spares will be required to be replaced at an anticipated annual cost of £3,000 per cremator.
- The average life of the cremator hearths is between 2 to 2.5 years and both elements will need to be replaced in 2014, at an approximate cost of £30,000, plus the associated loss of income as capacity will be reduced by half over an estimated 4 week period to carry out the works..

In 2012, works were undertaken to reline the existing cremators at a cost of  $\pounds$  50,000. The operational capacity had to be reduced to half during the 6 week programme, resulting in a loss of income cost of approximately £40, 000.

#### 2.4 MERCURY ABATEMENT

The cremation process naturally generates 'emissions' and these 'emissions' are subject to regulation.

Current legislation requires the UK industry as a whole, to 'abate' or eliminate 50% of all mercury emissions produced. (Note the mercury emissions are a result of amalgam fillings which have historically been used as tooth fillings.)

Although mercury emissions are not controlled by traditional cremators, the newly fitted abatement equipment in Macclesfield does eliminate 100% of the emissions. Through 'burden sharing' or combining the performance of the 2 facilities the Council is meeting the 50% target.

The concept of 'burden sharing' was originally proposed by DEFRA in 2004. The implementation of the burden sharing principle was accepted by Government who set a deadline for local authorities and private operators to ensure that 50% of all emissions met regulation standards. The target date for implementation was to be 31<sup>st</sup> December 2012.

As at the 31<sup>st</sup> December 2012, the UK cremation sector has achieved in excess of the 50% abatement target set by the Government. In addition, as DEFRA has now accepted crematoria opened after 2006 to be part of the calculation, the sector will have achieved well in excess of the target.

Currently Cheshire East are classed as "Independent Scheme Participants" and have registered as per the Process Guidance Note 5/2 (12) Appendix 2, Supplementary Guidance on burden sharing, issued by DEFRA. This in effect means that because Macclesfield Crematorium is abating 100% cremations in excess of 1500 a year compared to Crewe Crematorium (approximately 1200 cremations) we can legally burden share with ourselves.

#### 3.0 OPTIONS

The options listed below reflect the broad spectrum of options the Council has when considering the future of Crewe Crematorium. The options range from maintaining the existing status quo through to replacing the facilities with the most modern type of cremator.

### 3.1 Option 1

Continue to support the existing equipment in Crewe until the premises reached operational failure (forecast 2 - 3 years). Future provision would then be met from the one remaining facility at Macclesfield.

Advantages

- Continued provision of services in the South, until such time the cremators cease to functional.
- Potentially low capital commitments required
- The Service would continue to maintain both operational and managerial control
- The 100% abatement criteria would be satisfied.

#### Disadvantages

- The existing cremators will become increasingly unreliable
- The potential for increased operational costs as the equipment becomes gradually less efficient and require more attention.
- Adverse publicity and risk of cancellation of funerals more likely due to delays caused by breakdowns, problems sourcing replacement parts and equipment

- Potentially politically and socially unacceptable. Crewe has had a crematorium since 1957. There may also be reputational damages potentially perceived as being a geographically biased service provision.
- Increased pressures on capacity as the facilities at Macclesfield unable to cope with the current combined number of cremations. This would be exuberated further by the predicted increase in mortality rates.
- The Local Community in the south of the Borough may choose alternative locations in Stoke; Newcastle under Lyme; or Chester, (which are due to have a new crematorium facilities by February 2014), in preference to Macclesfield, due to less travel time.
- Increased revenue pressures, to overcome the loss of income, once the existing crematorium is decommissioned.

# 3.2 Option 2

Replacement of the cremators at Crewe with traditional 'unabated' cremators.

The feasibility report included budget cost estimates between £683,500 to £912,000 excluding VAT and fees, depending on the finally agreed scope of works to be undertaken and the phased working programmes required to maintain service continuity.

(Appendix B provides a brief outline of the budget cost estimates and the potential funding sources)

### Advantages

- The Local Community would retain access to both of the existing facilities
- Modern and more efficient equipment would use less energy and require less maintenance.
- Revenue contributions would remain the same.
- Service reduction and subsequent loss of income would be reduced to a minimum.
- Business continuity remains stable as the Council would be able to meet the existing forecast increase in the death rate
- The risk of any potential procurement claims or challenges from existing Framework supplier would be omitted.
- The original procurement framework could be used but it is due to expire in June 2013.

# Note:

- The Government could introduce legislation that requires 100% abatement by 2020. However a survey carried out on behalf of DEFRA in 2000, identified that 23% of all crematoria would be forced to close, for a variety of site specific reasons if abatement of all cremators was to be a requirement. Even if legislation was introduced on previous occasions there has been a 7-8 year lead in time to implement.
- In January 2013 a global legally binding treaty aimed at reducing environmental pollution from mercury, to which amalgam makes a contribution was agreed. The treaty means that Nations will be allowed to phase down amalgam use over an appropriate time period. By 2025 the UK should see a significant reduction in the amount of mercury emitted from crematoria.

### Disadvantages

- The opportunity to take full advantage of the latest technology and equipment would be reduced.
- The installation of traditional cremators would not address previously perceived service delivery improvements in relation to the existing buildings including those previous comments of the age and condition of the facilities and poor access. Note a separate report is being prepared for Council regarding refurbishing the facilities.
- Insufficient time to seek the appropriate approvals to enable the procurement of works through the existing framework (expiry at end of June 2013) would mean that a new procurement process would have to be undertaken.

# 3.3 Options 3

The replacement of the cremators, similarly to Macclesfield with modern abating cremators. Although the timescale for the manufacturing of the equipment would be the same as in option 2 ie 6 - 9 months from receipt of order / contract, additional works would be required to alter / refurbish the existing buildings, services, etc... to accommodate the overall requirements. This could potentially add between 3 to 6 months on the overall programme.

### Advantages

- The Local community would retain access to two facilities within the Borough.
- Both facilities would satisfy any future changes in government emission targets
- The new installation plant and equipment would be new and introduce greater energy and maintenance efficiencies due to the potential to operate at lower temperatures.
- The new equipment would also allow the Council to take advantage of the national Crematoria Abatement of Mercury Emissions Organisations (CAMEO) scheme. This scheme was set up by the Federation of Burial and Cremation Authorities and has the potential to generate income for each cremation, with crematorium owners who have exceeded the minimum abatement threshold compensated by a levy on those that have not done this. The federation have the responsibility to provide information to DEFRA on the achievement of the 50% abatement requirement.
- Business continuity remains as the authority could meet the existing forecast increase in the death rate

# Disadvantages

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- There would be additional Capital funding implications, as the scheme costs are likely to be in excess of £1.5 million, due to the to undertake significant construction works, upgrade energy supplies and find additional storage space. Based on the funding shortfalls outlined above, alternative consideration would have to be given to reducing the overall gap in the funding shortfall by financing over the full life of the equipment.
- A potentially greater loss of income would be incurred due to the more comprehensive building and installation works that would be required.

Reduction in

- overall cremations may also lead to adverse publicity and potential migration of service users.
- New 'abating' cremators would require a new procurement exercise to be undertaken. In terms of timescales, it would take approximately 6 to 9

months to undertake the procurement process and be in a position to progress implementation.

 There would also be a risk of potential claims from the current Framework supplier; Facultative Technologies to the Council, for loss of potential business, profit, should the Council attempt to procure the works through an alternative process.

### 4.0 PROCUREMENT

#### 4.1 Like for Like

If the decision is taken to replace the cremators with like for like facilities there is the opportunity to take advantage of an existing procurement agreement.

In 2008 a framework agreement relating to the supply, installation and maintenance of new cremators across various crematoria in the North West Region of England was drawn up, of which both Macclesfield Borough Council and Crewe and Nantwich Borough Council were participants.

In 2009 the contract was awarded to Facultative Technologies, which resulted in the cremators at Macclesfield being replaced in 2011/12. The framework was for a 4 year period and will expire in June 2013, therefore if Cheshire East wished to use this framework the appropriate authorisations will need to be in place prior to this date.

#### Abatement Equipment

If the decision is taken to replace with abatement equipment then a full procurement process will need to be completed.

### 5.0 FINANCE

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ption 1 will continue to incur repair costs with probable unexpected closures, therefore potentially reducing income levels and customer service.

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ption 2 is estimated at being part funded from existing revenue contributions together with those expected during 2013-14. However, it is important to recognise that this option will reduce revenue income receipts by approximately £180,000 due to a reduction in capacity during the installation period of the new cremator.

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ption 3 – as detailed in the report, current expected costs are in the region of  $\pounds 2$  million which will significantly extend the payback period. In addition, an approximate first year loss of revenue income of approximately  $\pounds 1.73$  million will be incurred as the facility will be closed completely for an estimated period of eight months.

### 6.0 LEGAL

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A review of the existing Framework Agreement terms and conditions has been undertaken. The existing building contract terms and conditions were set out in full in the procurement process and are not capable of alteration.